

ABSTRACT OF THE DISCLOSURE

A liquid crystal display is provided, which includes: a liquid crystal panel including a gate line, a data line, and a pixel including a switching element connected to the gate line and the data line; a gate driver applying a gate signal for controlling the switching element to the gate line; and a data driver selecting gray voltages corresponding to gray signals and applying the selected gray voltages to the data line. The gate signal includes a gate-on voltage for turning on the switching element and a gate-off voltage for turning off the switching element. The gray voltages include pairs of positive and negative voltages (V^+ , V^-) and $\frac{V^+ + V^-}{2} = V_{\text{const}}$ for each gray, where V_{const} indicates a predetermined level. The gate-on voltage continuously decreases from a first level to a second level for a predetermined time, and the first level (V_{on1}) and the second level (V_{on2}) satisfy a relation given by,

$$\frac{V_{\text{on1}} + V_{\text{const}}}{2} - \frac{V_{\text{on1}} + V_{\text{const}}}{2} \times 10\% \leq V_{\text{on2}} \leq \frac{V_{\text{on1}} + V_{\text{const}}}{2} + \frac{V_{\text{on1}} + V_{\text{const}}}{2} \times 10\%.$$